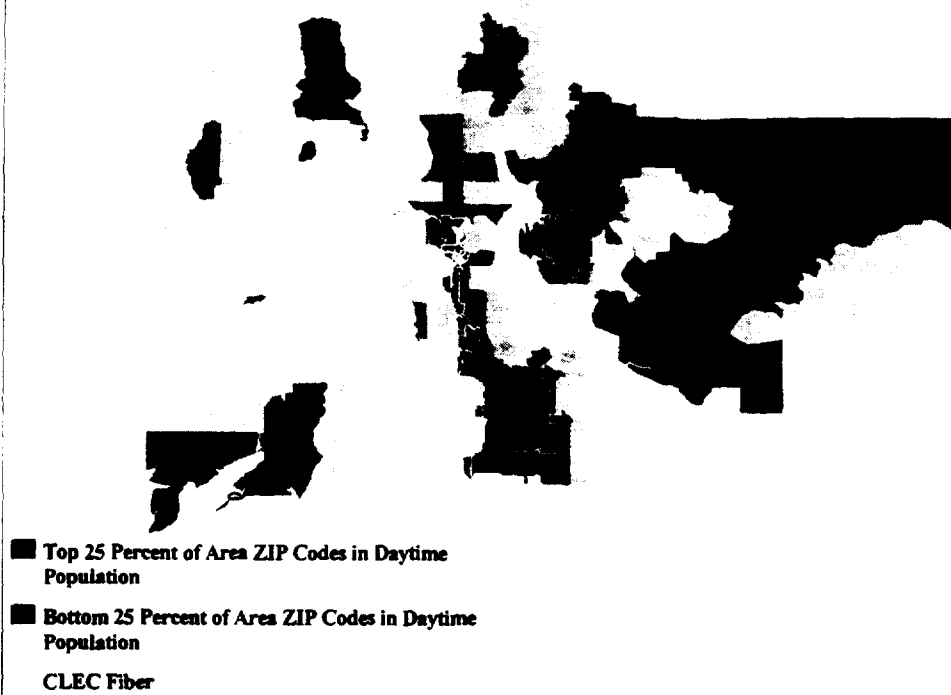
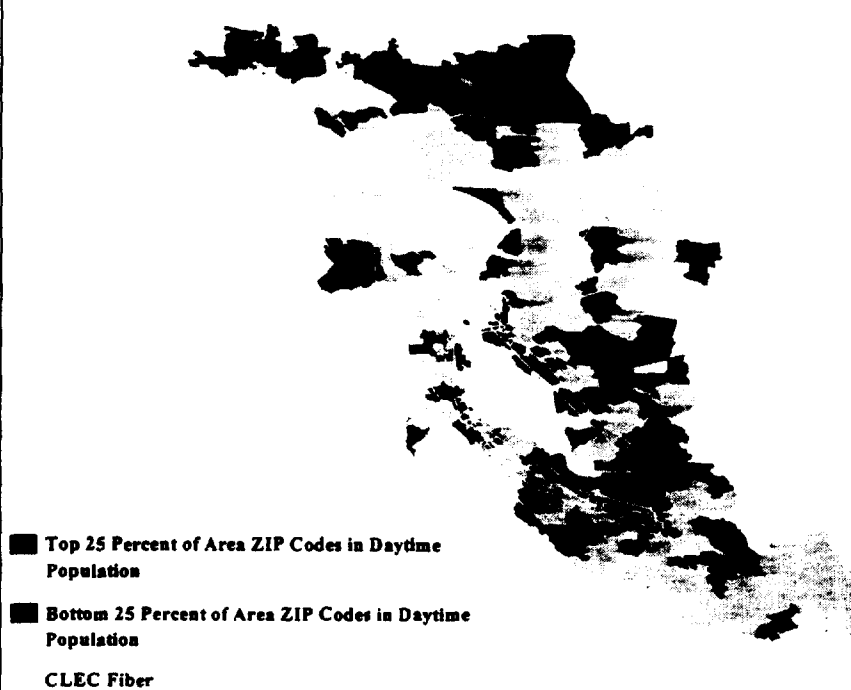


Map 5. Competitive Networks In Seattle



Map 6. Competitive Networks In San Francisco



WorldCom, which announced an unsolicited \$30 billion stock bid for MCI on October 1, 1997,⁷⁶ has focused its competitive efforts almost exclusively on the business side of the market. The company's local arm, MFS, has constructed 52 fiber networks to serve businesses in major markets, and has plans to purchase fiber networks in 40 other markets as part of its Brooks Fiber and MCI acquisitions.⁷⁷ WorldCom/MFS has a "[b]usiness customer focus," and a "focus on major U.S. and international cities."⁷⁸ Counting both the MCI and Brooks Fiber assets that WorldCom proposes to acquire,⁷⁹ the new WorldCom would own local fiber networks in 92 cities.⁸⁰ But WorldCom is equally committed to staying out of residential markets. "Our strategy is not in the consumer business," the company flatly declares. "It's very difficult for us to find a way to make economic sense out of the advertising budgets, the customer service budgets, etc., required to be in the consumer business."⁸¹ According to Chairman and CEO Bernard Ebbers, "[N]ot AT&T, not MFS or anyone else, is going to build local telephone facilities to residential customers. Nobody ever will, in my opinion."⁸²

Even WorldCom's long-distance business is overwhelmingly focused on business customers. Only 5 percent of WorldCom's revenues come directly from residential end users.⁸³

⁷⁶*Brooks Fiber Acquired: WorldCom Makes Unsolicited \$29-Billion Stock Bid for MCI, Topping BT Offer*, Communications Daily, Oct. 2, 1997.

⁷⁷WorldCom Press Release, *WorldCom and Brooks Fiber Announce Merger; Expands WorldCom's Local Presence from 52 Metropolitan Areas to 86; Adds Significant Local Access Expertise, Local Fiber Networks and Switching Capacity*, PR Newswire, Oct. 1, 1997.

⁷⁸S. Comfort, et al., Morgan Stanley, Dean Witter, Co. Rpt. No. 2556537, WorldCom Inc., at 15 (June 3, 1997).

⁷⁹*WorldCom to Acquire Brooks Fiber; Makes Offer for MCI Comm.*, Standard & Poor's, Oct. 1, 1997; *Brooks Fiber Acquired: WorldCom Makes Unsolicited \$29-Billion Stock Bid for MCI, Topping BT Offer*, Communications Daily, Oct. 2, 1997.

⁸⁰WorldCom serves 52 cities, Brooks Fiber serves 34 cities that WorldCom does not already serve, and MCI metro serves another 8 cities that neither of the other two companies serve. *WorldCom Brooks Fiber*, Reuters, Oct. 1, 1997.

⁸¹M. Mills, *WorldCom Would Shift MCI's Focus*, Washington Post, Oct. 3, 1997, at A1 (quoting John Sidgmore, WorldCom Vice Chairman); G.W. Woodlief, et al., Prudential Securities Inc., Co. Rpt. No. 2539124, WorldCom Inc., at 1 (Mar. 10, 1997). See also K. Russell, *Ebbers: WorldCom, Mississippi Paired for the Future*, Mississippi Business Journal, May 12, 1997, at 13 (quoting Bernard Ebbers: "[O]ur focus is primarily on business customers."); T. J. Mullaney, *Competition Calling: Anyone There?*, Baltimore Sun, Apr. 6, 1997, at 1D (quoting Ron Vidal, WorldCom vice president for new ventures, "We don't play in residential.").

⁸²M. Mills, *Hanging Up on Competition?*, Washington Post, June 1, 1997, at H1.

⁸³T.K. Horan, et al., Smith Barney, Co. Rpt. No. 1826935, WorldCom Inc., at Table 4 (Jan. 7, 1997). The company earns 20 percent of its revenues from residential customers, but only indirectly, by selling network capacity wholesale to resellers like Excel Communications. S. Comfort, et al., Morgan Stanley, Dean Witter, Co. Rpt. No. 2556537, WorldCom Inc., at 9 (June 3, 1997).

WorldCom and MCI combined would serve some 27 million presubscribed long-distance lines (about 17 percent) and earn about \$20 billion in long-distance revenues (a roughly 25 percent market share).⁸⁴ Soon after the proposed acquisition of MCI was announced, one WorldCom official candidly remarked that WorldCom's "religious focus is on the business customer . . . [i]t is a jihad . . . [t]his other market is something new," and suggested that the company "would consider" turning MCI's 20 million residential customers over to other long-distance companies when the merger was completed.⁸⁵ WorldCom plans to compete aggressively for business customers, however, offering them bundles of local, long-distance, and Internet service.⁸⁶

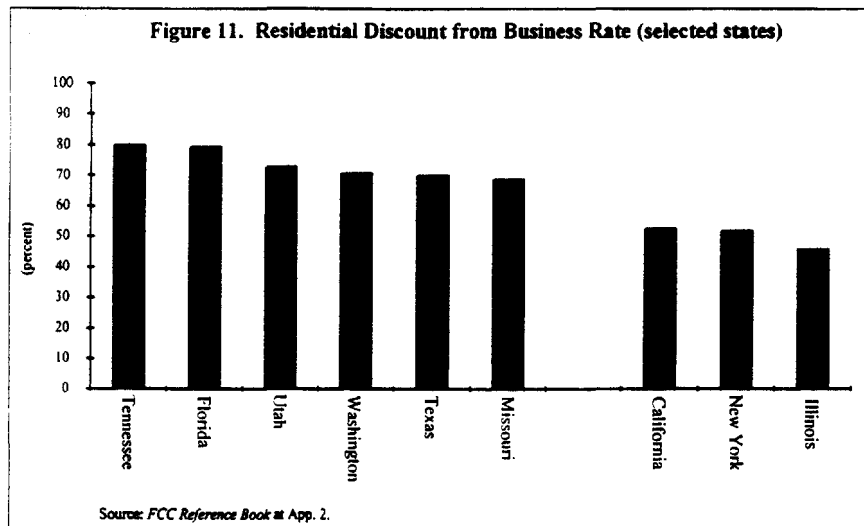
Until competition has permeated every last corner of the business market – a process that will surely take some years – no other competitive strategy would make sense. Residential rates are pegged some 50 to 80 percent lower than business rates everywhere in the country.⁸⁷ **Figure 11.** But the actual cost of providing service to businesses is almost always much lower, because businesses congregate in more urban areas, and because many businesses use multiple lines. For new entrants, the price-to-cost ratios are at least twice as attractive, and more typically 4 or 6 times as attractive, in business markets than they are in residential ones. For multi-line businesses, the ratios rise higher still.

⁸⁴*FCC Long Distance Market Shares* at Tables 2, 3, and 5.

⁸⁵M. Mills, *WorldCom Clarifies MCI Plans*, Washington Post, Oct. 4, 1997, at D1 (quoting Vice Chairman John Sidgmore).

⁸⁶According to one analyst, WorldCom "envision[s] turning its \$600 per month long-distance customer into an estimated \$1,500 combined local (\$300 per month), long-distance, and Internet (\$600 monthly) customer." G.W. Woodlief, et al., Prudential Securities Inc., Co. Rpt. No. 2539124, WorldCom Inc., at 2 (Mar. 10, 1997).

⁸⁷Virginia and Tennessee have the highest residential discount, at 80 percent; Illinois the lowest, at 45 percent. *FCC Reference Book* at App. 2. Statewide figures are averages of the rates for the cities surveyed in each state.



Local Toll Service. For business and residential subscribers alike, the highest profits, and lowest costs, are certainly centered in the market for local toll services. In states that have ordered local toll dialing parity⁸⁸ – including the two most populous states, California and New York – competitors are already aggressively bundling resold local service with their own local toll services.⁸⁹ In California, for example, MCI bundles resold Pacific Bell service with its own local toll service to offer unlimited local and local toll calling for \$24.95.⁹⁰ For most residential subscribers, this is almost certainly less than the cost PacBell alone incurs to provide the local service that MCI resells. But PacBell provides that service for resale at 17 percent off its retail rates,⁹¹ or about \$11, which allows MCI, in effect, to charge \$15 a month for unlimited local toll calling over MCI's network.

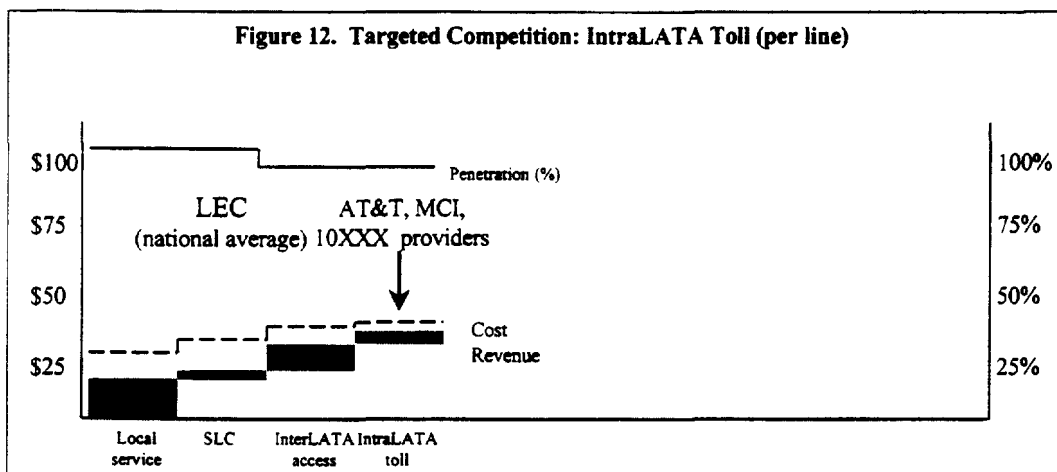
⁸⁸In the 40 states that have thus far ordered dialing parity, the orders are contingent upon fulfillment of the Act's requirements. 47 U.S.C. § 251(b)(3) (requiring all LECs to provide dialing parity to competing providers). *But see* California v. FCC, No. 96-3519 (8th Cir. Aug. 22, 1997) (vacating FCC's dialing parity rules); 47 U.S.C. § 271(e)(2)(B) (exempting the Bell Companies from providing intraLATA toll parity in any state that had not ordered it as of December 19, 1995 until (1) the Bell Company obtains authority to provide long-distance service in that state, or (2) 3 years from enactment, whichever is sooner).

⁸⁹AT&T, MCI, and Sprint are not, however, permitted to bundle a resold local service obtained from a Bell Company with their own long-distance service in any state, until the Bell Company in that state receives in-region interexchange authority, or three years from enactment, whichever is sooner. 47 U.S.C. § 271(e)(1).

⁹⁰J. Angwin, *Why It Pays for Consumers to Shop Phone Company*, S. F. Chron., Apr. 1, 1997, at D6.

⁹¹Rulemaking on the Commission's Own Motion Into Competition for Local Exchange Service at App. B, Decision No. 96-03-020 (Cal. PUC Mar. 13, 1996).

MCI, AT&T, and other interexchange carriers offer local toll services in many markets at steep discounts below incumbent carrier rates.⁹² In June, MCI announced it would offer flat-rate local toll calling plans to residential customers in 40 states.⁹³ As of May 1997, AT&T claimed more than five million customers had signed up for AT&T local toll service.⁹⁴ LCI announced in July that it is offering local toll service through presubscription in 23 states.⁹⁵ Hundreds of other companies compete in the local toll market using 10-XXX "dial-around" access codes.⁹⁶ Figure 12.



BellSouth estimates it has lost 1 million local toll customers in Florida alone, or 20 percent of its base in that state, during the past 20 months to competitors such as AT&T.⁹⁷ Nationwide, analysts estimate that competitive carriers have already captured 15 percent of all local toll traffic, and predict 50 percent capture within three years.⁹⁸

⁹²MCI's rates are up to 44 percent lower than the average LEC rate – 12 cents per minute in most regions, down to as low as 4 cents per minute in PacBell's serving areas. MCI Press Release, *Local Toll Revolution: MCI Offers Millions of Dollars in Savings to Consumers in 40 States*, June 2, 1997.

⁹³*Ibid.*

⁹⁴AT&T, Now AT&T Puts Even More Within Your Reach, <http://www.att.com/localtoll/consumer>.

⁹⁵LCI Press Release, *LCI International Offers Savings on Local Toll Service*, PR Newswire, July 9, 1997.

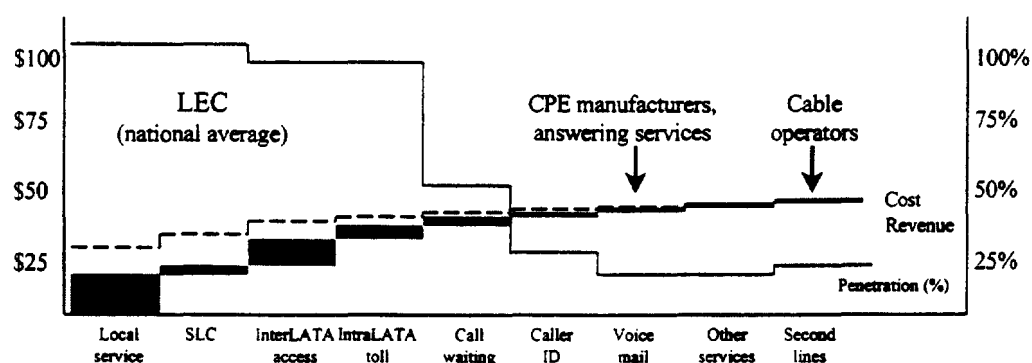
⁹⁶The demand for such access codes has been so high that the industry has been forced to transition from 3-digit to 4-digit Carrier Identification Codes. Order, Administration of the North American Numbering Plan Carrier Identification Codes, CC Dkt. No. 92-237 (F.C.C. July 18, 1997).

⁹⁷S. Rosenbush, *Competition Bringing Cheaper Local Toll Calls*, USA Today, Aug. 5, 1997, at 1B.

⁹⁸See, e.g., *ibid.*; T. Kontzer, *Pacific Bell's Hard Sell: Looming Competition Sparks Lavish Ad Push*, Business Journal – San Jose, Oct. 31, 1994 ("Companies . . . could lose as much as 40 percent of their [local toll] customer base.").

Vertical Services. Wherever it is technically feasible to do so, local competitors compete to offer residential customers the vertical services alone, or a bundle of basic and vertical, but not just basic. Manufacturers of answering machines and electronic databases provide some competition through sales of stand-alone equipment. AT&T bundles call waiting into its basic local service in some cities in Illinois.⁹⁹ MCI openly admits that its “focus is on high-value customers who use multiple services,”¹⁰⁰ and that it intends to “continue to transition away from low-value Mass Market customers who respond only to price promotions.”¹⁰¹ Providers of shared tenant services have had great success in offering vertical service packages to their subscribers.¹⁰² **Figures 13 and 14.**

Figure 13. Targeted Competition: Vertical Services (per line)



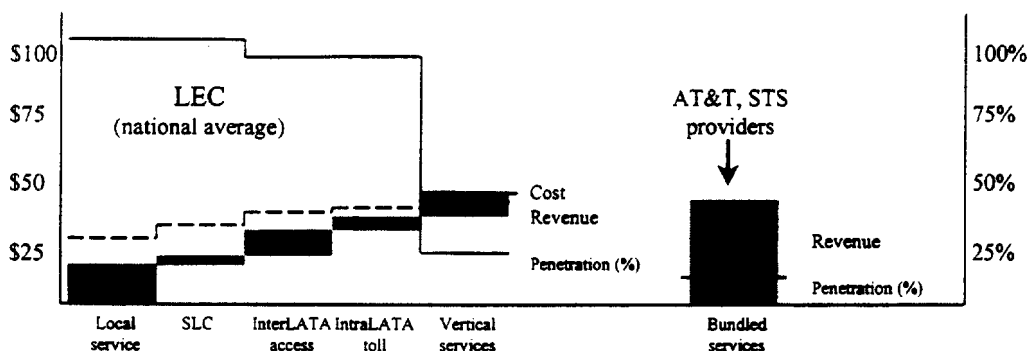
⁹⁹J. Kirk, *AT&T Moves in on Ameritech's Market*, Chicago Sun-Times, Apr. 16, 1997, at 72.

¹⁰⁰MCI, First Quarter 1997 Investor Bulletin, http://investor.mci.com/investor_pubs/quarterlies/qr_1997/qr_1997-1.html.

¹⁰¹*Ibid.*; see also *LD Firms Reject Local Service Price War*, Telecommunications Alert, Apr. 11, 1997 (citing AT&T, Sprint, and MCI representatives saying that they will not start a price war with the Bell Companies as they move into the local service market, and that they will focus on the quality and range of services, rather than price).

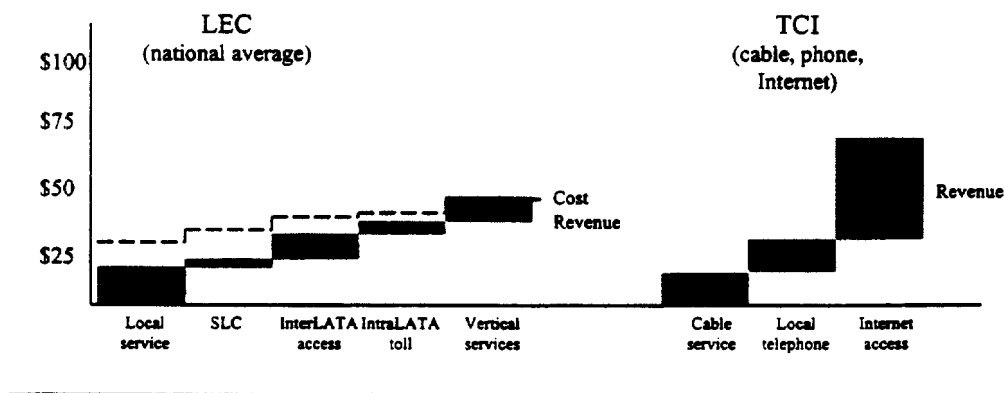
¹⁰²For example, Jones Communications in Alexandria, Virginia reports that 61 percent of its customers purchase a vertical service package in addition to basic service. K. Gibbons, *Jones Primes the Pump for Advanced Calling Buys*, Multichannel News, July 15, 1996, at 30A.

Figure 14. Targeted Competition: Bundled Services (per line)



Bundling likewise defines the residential competition provided by cable. Cable companies have already begun to offer high speed Internet access to their existing cable subscribers, using their existing networks. These offerings will in time make cable a formidable competitive threat as Internet services expand to encompass all others. The very last thing they will add, if they add it at all, will be conventional voice service, at conventional phone company prices. For example, TCI in Hartford offers cable and basic local services for a total of \$24.07 per month, vertical services for between \$5.95 and \$14.95 per month, and Internet access for \$39.95 per month.¹⁰³ Figure 15.

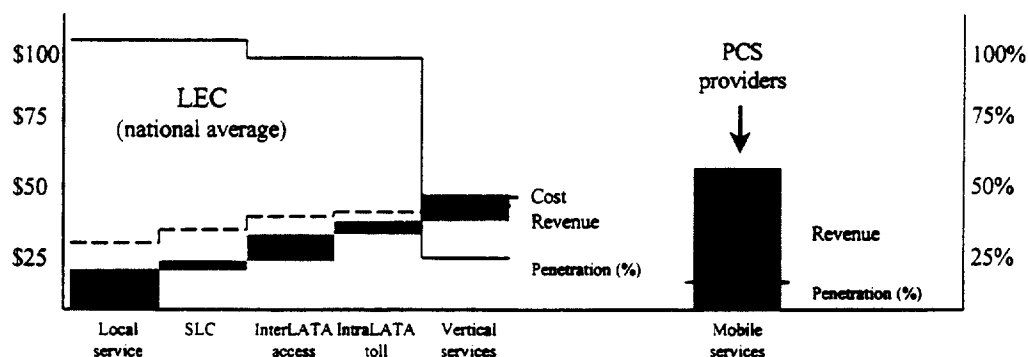
Figure 15. Residential Monthly Revenue and Cost (per line)



¹⁰³Warren Publishing, Television and Cable Factbook at D-237, (1996); conversation with TCI PeopleLink customer service personnel (Aug. 26, 1997); Cable Datacom News, Cable Modem Commercial Launches and Trials in North America, Sept. 12, 1997, <http://cabledatacomnews.com/cmhc7.htm>.

Mobility (wireless) itself is another “vertical” add-on of sorts. Wireless service remains more expensive than wireline, but less so than meets the eye. PCS providers routinely bundle in Caller ID, voice mail, and paging. On a bundled basis, these services are already priced at levels directly comparable to those charged for similar bundles of wireline residential alternatives – \$40 to \$50 per month. The one thing no PCS provider is much interested in offering is, once again, basic voice service, at the basic phone company price. **Figure 16.**

Figure 16. Targeted Competition: Mobility (per line)

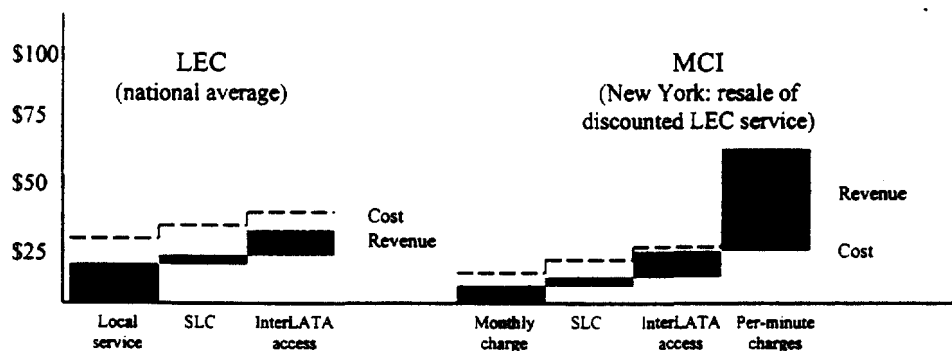


Measured Service. A final strategy recently adopted by some resellers is to offer residential service under pricing plans radically different from those prescribed by regulators for incumbent local phone companies. MCI, for example, has begun reselling Bell Atlantic’s (formerly NYNEX’s) local residential service in New York. MCI charges a modest \$9.80 a month for the resold line and dial tone. But on top of that, MCI charges 10.6 cents per minute for local calls.¹⁰⁴ MCI also bundles in local toll calls at 10 cents per minute. For a customer able to subscribe to a dime-a-minute long-distance service, it will therefore be cheaper to place a toll call of any kind, 30 miles or 3,000, than it is to call across town. In effect, MCI is offering to install the equivalent of a payphone on private premises, reselling Bell Atlantic’s below-cost service at a price even further below cost, while hoping to make a profit on measured services priced well above cost. Bell Atlantic itself – which is actually providing both the switching and transport for the cross-town call – receives only a discounted share of the per-minute charges that are needed to make MCI’s re-packaging of the service economically viable.

¹⁰⁴This is the daytime rate. MCI charges 8.7 cents per minute in the evening and 3.7 cents at night or on weekends. MCI, MCI Home Phone Service - New York, <http://www.mci.com/aboutus/products/local/NY2.shtml>.

The average residential customer subscribing to MCI's service would pay MCI about \$10 per month in fixed charges and nearly \$44 in local per-minute charges – with the service itself being supplied to MCI at discounted rates.¹⁰⁵ Figure 17. But of course, the service isn't aimed at average customers; it is aimed at customers who make few local calls but many toll calls. MCI plainly has no interest in reselling basic local residential service alone; even the 19.1 percent discount it gets from Bell Atlantic¹⁰⁶ probably would never cover MCI's costs of marketing and overhead. And it is inconceivable that MCI would ever build any facilities of its own simply to offer residential basic service at prices comparable to Bell Atlantic's undiscounted rates. There is no profit to be made undercutting incumbent prices that already sharply undercut economic reality.

Figure 17. Residential Monthly Revenue and Cost (per line)



The FCC itself has reached precisely that conclusion in the analogous context of payphones. Users of residential phones pay \$17 a month and 0 cents per minute; users of payphones have, in the past, typically paid \$0 a month and 10-25 cents per three-minute call.

¹⁰⁵The average residential customer originates 619 local calling minutes per month. NECA, Statistics on Network Usage by Carrier 1995 (1996) (in 1995 LECs reported over 2.2 trillion local dial equipment minutes); FCC Statistics of Common Carriers at Table 2.5 (166 million total access lines, 63 percent of which are residential). For the purposes of this calculation two assumptions were made: (1) the average residential line originates the same number of local minutes per month as the average business line; and (2) the number of originating and terminating minutes on all access lines are equal. The calculation for local per minute charges assumes that the 619 minutes per month break down as follows: 20 percent daytime, 40 percent evening, and 40 percent weekends.

¹⁰⁶Opinion and Order Determining Wholesale Discount, Joint Complaint of AT&T Communications of New York, Inc., et al., Against New York Telephone Company Concerning Wholesale Provisioning of Local Exchange Service, Case 95-C-0657 (N.Y. PSC Nov. 27, 1996).

Competitive payphone providers resell local service much as MCI attempted to do in New York, but they resell it in drugstores and supermarkets rather than in homes or apartments.

With open entry and a right to interconnect,¹⁰⁷ only price regulation remains as a possible obstacle to competition.¹⁰⁸ States that set prices too far below cost, the FCC recently concluded, "prevent the market from operating efficiently to deploy payphone facilities."¹⁰⁹ Competition rises as price regulation falls. Several states have in fact deregulated, and the overall state of competition is excellent.¹¹⁰ Competitors that won't resell residential service resell business service instead – often to "residential" consumers – through payphones located in convenience stores and gas stations. The indigent user too poor to pay even for highly subsidized residential service is served instead by payphone operators who compete aggressively for the business.

¹⁰⁷Payphone operators were granted the right to interconnect with local exchange networks in 1984. Memorandum Opinion and Order, Registration of Coin Operated Telephones, 49 Fed. Reg. 27763 (1984).

¹⁰⁸Report and Order, Implementation of the Pay Telephone Reclassification and Compensation Provisions of the Telecommunications Act of 1996, 11 FCC Rcd 20541, 20548 (1996). The Commission also noted some impediments to competition that might arise from inadequate consumer information, or from market power that derives from control of real estate. *Id.* at 20549-20550. But these locations, the FCC determined, were likely to be the exception rather than the rule. For the most part, payphones "are likely to face a sufficient level of competition from payphones at nearby locations to ensure that prices are at the competitive level." *Id.* at 20549.

¹⁰⁹*Id.* at 20548.

¹¹⁰*Id.* at 20547 ("Entry into the payphone business appears to be easy.").

3. COMPETITIVE OPPORTUNITIES AND REGULATORY IMPEDIMENTS

That some elements of basic, residential, local service are priced below cost complicates the competitive picture, but it does not, standing alone, preclude competition altogether. At current prices, incumbent local carriers themselves could not provide just basic residential service and nothing more, but they don't have to. Neither do their competitors. The typical customer buys enough additional local toll and vertical services to remain an economically attractive competitive target, absent other obstacles to entry. And the typical customer strongly prefers to buy the entire bundle from a single vendor, if (s)he can.

Customer Demand. That customers much prefer to buy a bundled package of telecom services is widely recognized in the industry. Local phone companies retain significant shares of local toll markets even where competitors undercut their prices quite significantly in states that have fully opened those markets to competition. A 1996 survey of over 800 U.S. households found that nearly 80 percent would prefer to subscribe to bundles of local and long-distance, wireless, data, and video services supplied through a single vendor.¹¹¹ From the supply side, vendors recognize that bundling lowers their marketing costs, raises customer loyalty, reduces churn levels, and increases overall usage¹¹² – in business and residential markets alike. MCI and AT&T have already begun to bundle long-distance and local toll services.¹¹³ Sprint is moving to “a common Sprint identity for all our products and services, including local telephone service, complex data systems, everything.”¹¹⁴ WorldCom is striving to define itself as “the single point-

¹¹¹*Consumers Would Prefer Bundled Branded Service*, Radio Comm. Report, Sept. 9, 1996, at 42. As AT&T has pointed out, “Customers have always liked bundles.” Joseph P. Nacchio, Executive Vice President, Consumer and Small Business Division, AT&T, *Keeping the Customers Satisfied*, speech before the Morgan Stanley Conference, New York, NY, Feb. 13, 1996.

¹¹²Brian Brewer, MCI, Business Markets Presentation at Slide 9, http://investor.mci.com/investor_pubs/presentations/brewer/sld009.htm. See also Remarks of Robert E. Allen, Former Chairman and CEO, AT&T, AT&T: Creating New Value in a “Fast-Forward” Industry, June 11, 1996, at 4 (“AT&T’s customers will be much less likely to switch if they’re connected to us with a bundle of services tailored to their needs.”).

¹¹³See note 89 in Section 2.

¹¹⁴Gary D. Forsee, President and COO, Sprint Long Distance Division, *The Power of Brand Image*, remarks at the Forbes-Amex Innovative Strategies Conference, May 16, 1996.

of-contact for . . . telecommunications needs.”¹¹⁵ GTE and Southern New England Telephone are already allowed to add bundled long-distance service to their residential offerings, and have been notably successful in doing so. Customers will buy bundles, rather than bits and pieces of service, if they can.¹¹⁶

In light of these strong consumer preferences, it seems clear that as soon as one vendor begins offering fully bundled local and long-distance service in any major market, other vendors will have to follow. They will have no choice.

Supply-Side Incentives. On the supply side of the market, providers have equally good economic reasons to bundle, too. Long-distance carriers can provide local services on the Class 4 switches already widely deployed in their networks.¹¹⁷ Cable companies have already deployed their wires, and loaded their costs, on video services; they can now offer high-speed data services at the margin. Electric companies may have similar opportunities to use their customer base to sell competitive local services.¹¹⁸ PCS will likewise forge ahead regardless, because for them the marginal costs of serving residential subscribers are quite low.¹¹⁹

¹¹⁵MFS Press Release, *MFS Now Offering Local Telephone Services Over Its Own Fiber Networks in Hartford and Stamford*, July 29, 1996. See also MFS Prospectus, Registration No. 333-4395, July 4, 1996, (WorldCom believes it is “uniquely positioned to take advantage of technical, regulatory and market changes which promote demand for an integrated set of communications services.”).

¹¹⁶D. Reingold, et al., Merrill Lynch Capital Markets, Ind. Rpt. No. 1705201, *Telecom Services: Long Distance*, at 23 (Feb. 15, 1996) (the players achieving the full bundle soonest and at lowest investment cost are likely to be able to offer more attractive cross-discounts to customers). See also B. Bath, et al., Lehman Brothers, Inc., Ind. Rpt. No. 1892197, *Telecom Services: RBOCs & GTE*, at 14 (July 9, 1997) (“Without [the ability to offer bundles] the RBOCs face significant degradation of their business customer base, as the IXC and CLECs will be offering a bundled package of services to attract the most profitable customers.”).

¹¹⁷AT&T already offers local service to 2,500 of its dedicated access customers in 45 states using its existing 4ESS switches, through a service called Digital Link. Digital Link provides AT&T with “the ability to take the existing network configurations of our large customers, add local traffic and route it accordingly.” J. Dix and D. Rohde, *AT&T Plots Invasion of Baby Bell Turf*, *Network World*, July 8, 1996, at 1 (quoting Harry Bennett, vice president and general manager of AT&T’s local services division); see also L. Turmelle, *AT&T Takes First Step to Local Service*, *Bridgewater (NJ) Courier-News*, Jan. 28, 1997, at A2.

¹¹⁸Restrictions that barred utility companies from providing telecommunications services were removed by § 103 of the 1996 Act. See, e.g., D. Pauly, *Electric Utility Will Add Telephone Service to Offerings*, *Rocky Mountain News*, Jan. 19, 1997, at 4f (Central & South West Corporation announced it would provide service in conjunction with ICG); A. Salpukas, *Texas Utilities Buys Texan Phone Company*, *Austin American-Statesman*, Aug. 26, 1997, at D1 (Texas Utilities recently purchased Lufkin-Conroe Communications, the fourth-largest local telephone company in Texas).

¹¹⁹Moreover, the potential profits from innovative new service outweigh any competitive losses stemming from unleashing the Bells – the regulatory issue discussed later in this section. And there may be no losses at all if regulators can be persuaded that cable data services and wireless services don’t actually offer true local competition.

Even in the least attractive regulatory jurisdictions, there may be some profitable opportunities to build out facilities to reach low-cost residential subscribers.¹²⁰ The costs of providing basic residential service vary by a factor of 15 or more.¹²¹ It costs a Bell Company, on average, 6 times more to serve its sparsely populated areas than its densely populated ones.¹²² Thus, while the overall average rate for basic residential service may be 50 percent below the overall average cost, cost itself varies by much more than 50 percent. As a result, the lowest-cost residential customers are already attractive competitive targets today, even if they buy basic service alone. This is why providers of "shared tenant services" are already targeting some large apartment buildings and condominiums.¹²³

Regulatory Impediments. But at present, all potential entrants to local markets also have strong reasons not to take any steps that would unleash powerful new rivalries from the Bell Companies. Bell Companies remain formidable potential competitors in all segments of telecom markets in which they do not currently compete. In the aggregate, Bell Companies earn more money, serve more customers, and employ more workers than long-distance carriers, cable companies, and wireless providers.¹²⁴ Table 5. Bell Companies also have excellent name recognition among all types of customers and in all sectors of telecommunications, and strong reputations for providing reliable service.¹²⁵

¹²⁰Competitors may find other reasons to build out networks to residential subscribers, even if it costs more than buying discounted service from incumbents. The "make or buy" decision is affected by many factors other than price. Competitors may build, rather than buy, to gain independence, flexibility, or the opportunity to differentiate their services, even when buying is nominally cheaper. See, e.g., B. Lyons, Specific Investment, Economies of Scale, and the Make or Buy Decision: A Test of Transaction Cost Theory, 26 J. Economic Behavior and Organization 431 (1995); J. Welch and P. R. Nayak, Strategic Sourcing: A Progressive Approach to the Make or Buy Decision, 20 Engineering Management Review 58 (1992); 8th Circuit Decision at 148.

¹²¹The Hatfield Model calculates the per-line monthly cost of providing service for nine different density categories. The range in costs calculated by this model is enormous; for example, while it costs SBC over \$200 per month to provide service to a customer in the remotest area of Nevada, it only costs about \$13 per month to provide service to a customer in the densest area. *Hatfield Model Release 3.1*.

¹²²Monthly costs to Bell Companies for providing service in the sparsest areas ranged from \$51.23 per line (Delaware) to \$204.57 (Nevada). Costs for the densest areas ranged from \$10.88 (Indiana) to \$14.81 (Nebraska). *Hatfield Model Release 3.1*.

¹²³*Universal Service Order* at ¶ 236 ("In general, as more households are in multi-tenant units rather than single-family dwellings, the amount of cable required to serve the households decreases.").

¹²⁴Individual Bell Companies, like SBC, are the only companies on the horizon with revenues even approaching AT&T's. SBC/PacTel's 1996 revenues were \$24 billion, compared with AT&T's \$52 billion. 1996 Annual Reports.

¹²⁵H.E. Blount, Rauscher Pierce Refsnes, Ind. Rpt. No. 1777513, Telecommunications Reform: Winners & Losers, at 5 (June 14, 1997) ("With their installed customer base and brand name recognition in local markets [the Bell Companies] will be powerful [long-distance] competitors.").

Table 5.		
	1996 Revenues (\$ billions)	Employees (thousands)
Bell Companies	97	460
Interexchange Carriers ¹	82	250
Cable Companies	30	120
Wireless	26	120
Other CLECs	2.2	24
¹ AT&T, MCI, Sprint, and WorldCom. Sources: 1996 Annual Reports; Ind. Anal. Div., FCC, Trends in Telephone Service, at Table 44 (Mar. 1997); <i>FCC Long Distance Market Shares</i> at Table 5; <i>Connecticut Research 1997 Local Competition Report</i> at 21; Donaldson, Lufkin & Jenrette Securities Inc., Ind. Rpt. No. 1875854, Wireless Communications Industry, at 7 (Mar. 7, 1997) (<i>DLJ Wireless Report</i>); National Cable Television Association, Cable Television Developments at 8 (Fall 1996) (estimated from 1995 data).		

The single best competitive fact for their competitors is that Bell Companies are not currently permitted to compete in the highly profitable long-distance toll markets. That handicaps competition not only in long-distance markets, but in local markets too. Local customers prefer to buy complete service packages, not bits and pieces. Finally, the FCC has made clear that AT&T, MCI, and other potential competitors can keep Bell Companies caged by competing only in the more lucrative business markets, while staying out of the less profitable residential markets entirely.

Every potential competitor in local residential markets will quite rationally assess the opportunities for competition not only on their economic merits, but also on their regulatory de-merit. The de-merit is the threat of freeing the Bell Companies to compete. In most markets today, the potential profit from entering the residential side of local markets – depressed in any event by an array of subsidies and below-cost prices – is plainly outweighed by the potential losses entailed by any form of competition that would free Bell Companies to compete too.

For AT&T and MCI, the paramount competitive objective is to thwart Bell Company entry into long distance. These two companies serve 84 percent of residential interexchange access lines, and also provide most of the facilities used by another 11.4 percent of lines served by resellers.¹²⁶ Together, they earn some \$31 billion in revenues from the residential side of the

¹²⁶*FCC Long Distance Market Shares* at Table 9. Sprint has been generally unsuccessful in penetrating residential markets, while most of the other smaller competitors, including WorldCom, do not even offer interexchange service to residential customers. *Id.* at Table 10.

interexchange market.¹²⁷ Independent analysts estimate that residential service accounts for 70 to 80 percent of interexchange profits,¹²⁸ and agree that Bell Companies present the biggest threat to those profits.¹²⁹ The entire domestic residential market is “in theory a potential opportunity for the [Bell Companies].” AT&T, in particular, is seen as “disproportionately vulnerable to RBOC entry,”¹³⁰ at risk of losing \$8 billion annually to Bell Company competitors.¹³¹

Accordingly, both companies are doing their utmost to block Bell Company entry into the residential long-distance markets by persuading regulators that local competition has failed.¹³² They resisted signing interconnection agreements: combined, they have signed a total of only 60 agreements, even fewer than the 76 agreements signed by their much smaller rivals, TCG and WorldCom. **Figure 18.** They have filed with regulators ever-expanding lists of trivial demands: U S West employees, for example, are called upon to don Velcro patches on their uniforms so as to appear to be AT&T employees when servicing lines resold by AT&T. **Table 6.** Both companies have complained endlessly that local competition is being thwarted by the nefarious stratagems of local carriers.¹³³ They have moved much less aggressively than their smaller rivals in terms of capital spending in general,¹³⁴ and deploying new local switches in particular.¹³⁵ (See Figures 3 and 18).

¹²⁷AT&T and MCI derive 54 percent and 33 percent of their long-distance revenues, respectively, from residential services. *FCC Long Distance Market Shares* at Tables 6 and 10.

¹²⁸D. Reingold, et al., Merrill Lynch Capital Markets, Co. Rpt. No. 2563276, AT&T, at 4 (July 8, 1997).

¹²⁹See, e.g., D. Reingold, et al., Merrill Lynch Capital Markets, Ind. Rpt. No. 1905263, Long Distance, at 7, 70 (May 16, 1997) (“*Merrill Lynch Long Distance Report*”).

¹³⁰J. Grubman, Salomon Brothers, Telecommunications Services, Regional Bell Operating Companies - Opportunities Ring . . . While Danger Calls, at 8 (Jan. 6, 1996).

¹³¹D. Ackerman, *Why Is AT&T Afraid to Compete?*, Wall St. J., July 3, 1997, at A10; *Merrill Lynch Long Distance Report* at 69 (discussing a presentation by AT&T Consumer Division Chief Gail McGovern).

¹³²On several occasions, the FCC has suggested that only AT&T, MCI, and Sprint will “count” as local exchange competitors for the purposes of § 271. See, e.g., Statement of Reed E. Hundt, Chairman, FCC, on Implementation of the Telecommunications Act of 1996, before the Subcommittee on Telecommunications and Finance, Committee on Commerce, U.S. House of Representatives, at 18-21 (July 18, 1996).

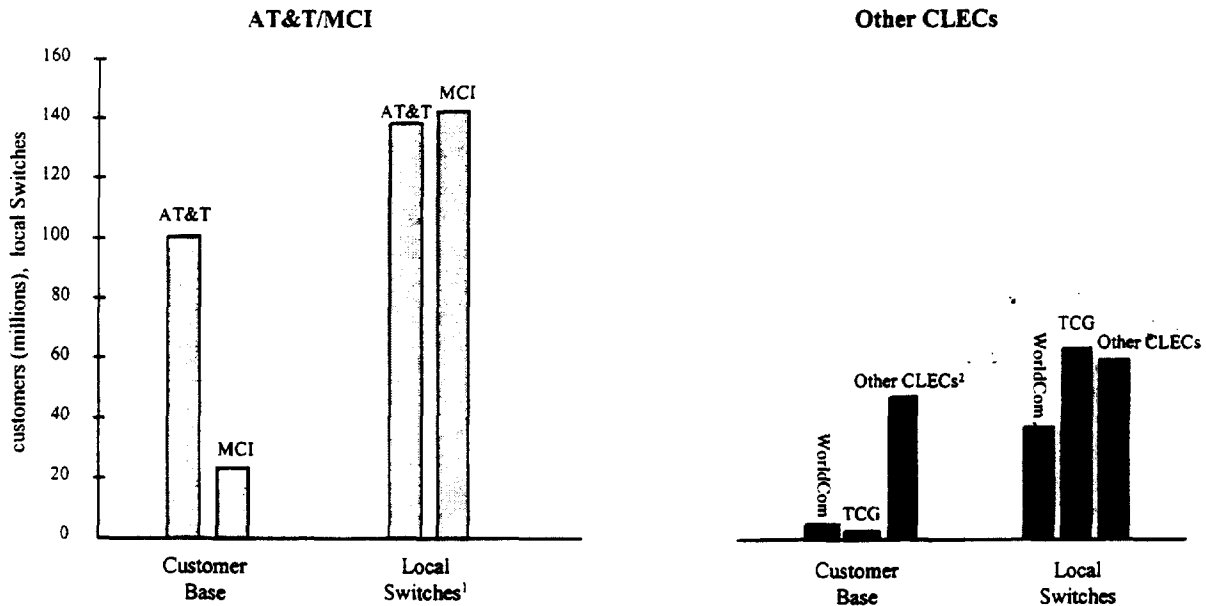
¹³³Robert E. Allen, *Telecommunications Reform: Shaping Tomorrow Today*, delivered to the Fuqua School of Business, Duke University, Durham, N.C., Apr. 8, 1997; Tim Price, President and CEO, MCI, *The Fair Play Test: MCI's Challenge To Local Phone Monopolies*, remarks at the Economic Strategy Institute, July 15, 1997.

¹³⁴Since passage of the Act, capital spending by other local competitors has been twice that of AT&T and MCI. Compare 1996 Annual Reports and Second Quarter 1997 Quarterly Reports of AT&T and MCI with 1996 Annual Reports and Second Quarter 1997 Quarterly Reports of Continental Cablevision, Cox, Comcast, TCI, WorldCom, TCG, Brooks Fiber, ICG, and Sprint.

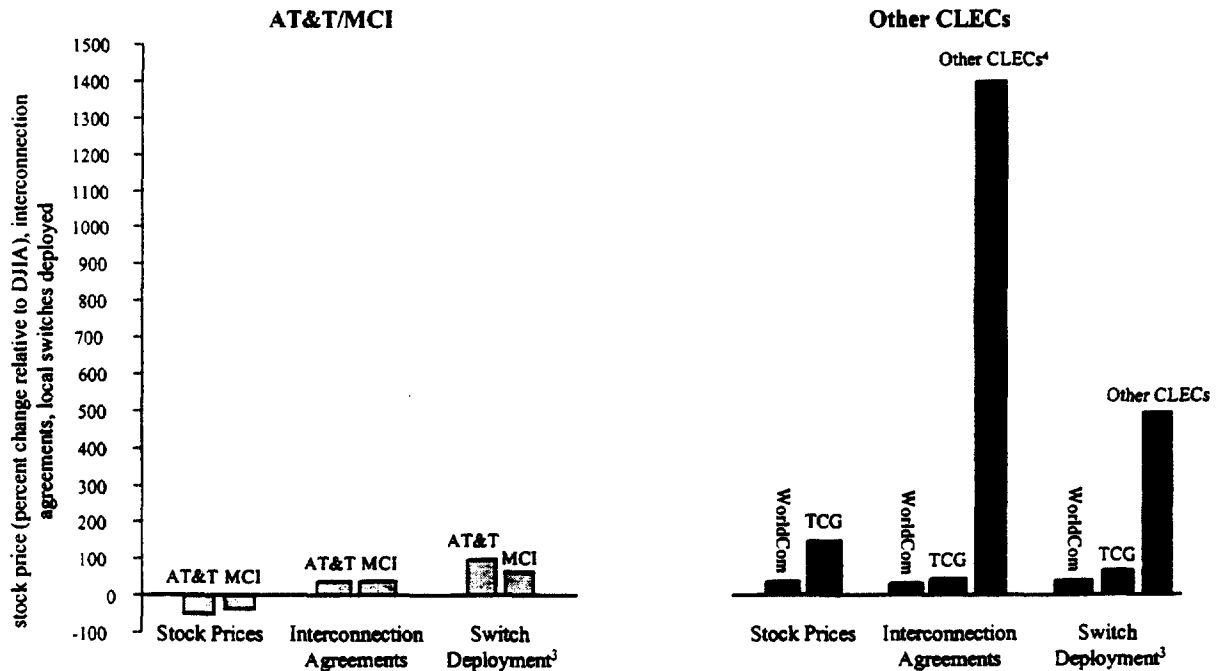
¹³⁵It is not even clear how many of AT&T's “deployed” switches have been made operational. See D. Rohde, *Bagging a Bargain*, Network World, July 21, 1997, at 1.

Figure 18.

CLEC Status: January 1996



CLEC Progress: January 1996 to November 1997



Notes: ¹Includes tandem switches that can be upgraded to perform local services. ²Other CLECs include Sprint, Excel, Frontier, LCI, Cablevision, Cox, TCI, Time Warner, and Comcast. ³Number of switches as of July 1, 1997. ⁴Excludes agreements signed by cellular providers.
Sources: Quicken, <http://quotes.quicken.com> (stock prices); USTA, Draft Competition Report, Nov. 1, 1997; Bellcore LERG Database, 1995 Annual Reports

Table 6.

Demand	Resolution
AT&T and MCI demanded that the Missouri PSC allow SBC's customers to "abrogate their contracts in order to accept proposals from AT&T and MCI." ¹	"The Commission finds that a decision on this issue is not required to dispose of the arbitration." ²
AT&T demanded that AT&T's logo be placed on BellSouth's telephone directories. ³	"At no point in 251 of the Act, or anywhere in the Act for that matter, does the issue of directory covers appear. Such an issue does not even bear a casual relationship to any of the exclusive issues for negotiation (and therefore arbitration) appearing in the Act . . . AT&T's request for an order directing the placement of its name and logo on the directory cover is rejected." ⁴
AT&T proposed that "repair and maintenance services provided [by U S West personnel] on behalf of AT&T be rebranded to AT&T's brand, to prevent customer confusion." ⁵	"CLECs must recognize that they are in fact not employing the individuals if they contract with an ILEC. Any requests to rebrand uniforms and vehicles by such items as Velcro patches and rolling signs is rejected by the Commission." ⁶
AT&T insisted that bills or receipts given to customers for repair service provided by U S West personnel (on behalf of AT&T) bear the AT&T logo. ⁷	"It is not reasonable to dispatch a repair vehicle for the day, with instructions to use a selection from a variety of paper provided which would provide the brand of the particular reseller who contracted for service at each location." ⁸
AT&T demanded exemption from administrative fees for pole and conduit attachments that are routinely charged to cable TV providers. ⁹	"SWBT shall be allowed to charge administrative fees and shall determine rates for access to poles, conduits, ducts, and rights-of-way identical to those applied to CATV providers." ¹⁰
AT&T demanded specific notification of "changes in terms or conditions under which services are offered at retail to subscribers, including introduction or discontinuation of features, functions, services or promotions." ¹¹	"AT&T can obtain reasonable notification of the matters it requested upon U S West's filing for Commission approval of such matters. We believe that additional notification is unnecessary and may competitively disadvantage U S West." ¹²
AT&T demanded that all of BellSouth's services be provided for resale in Louisiana, regardless of whether they are priced below existing tariffed rates. ¹³	"[Specifically with regard to resale availability of Contract Service Arrangements:] CSAs are, by definition, services provided in lieu of existing tariff offerings and are, in most cases, priced below standard tariffed rates. Requiring BellSouth to offer already discounted CSAs for resale at wholesale prices would create an unfair competitive advantage for AT&T and is rejected." ¹⁴
AT&T demanded that BellSouth be held financially responsible for any unbillable or uncollectible revenues due to personnel error. ¹⁵	"Even a casual review of the Act will readily disclose that the requested contractual language governing liability for unbillable or uncollectible revenues is not among those issues specifically enumerated for negotiation and arbitration in the Act. This issue is therefore inappropriate for arbitration, and should properly be addressed on case-by-case basis in an appropriate judicial forum." ¹⁶
Sources: 'Missouri Public Service Commission, Arbitration Order at 46, AT&T Communications of the Southwest, Inc.'s Petition to Establish an Interconnection Agreement with Southwestern Bell Telephone Company, MCI Telecommunications Corporation and Its Affiliates, Including MCI Metro Access Transmission Services, Inc., for Arbitration and Mediation of Unresolved Interconnection Issues with Southwestern Bell Telephone Company, Case No. TO-97-40 and TO-97-67 (Dec. 11, 1996) (AT&T and MCI Missouri Arbitration Order). 'Ibid. 'Louisiana Public Service Commission, Order No. U-22145 at 22, Interconnection Agreement Negotiations Between AT&T Communications of the South Central States, Inc., and BellSouth Telecommunications, Inc., of the Unresolved Issues Regarding Cost-Based Rates for Unbundled Network Elements, Dkt. No. U-22145 (Jan. 15, 1997) (AT&T Louisiana Arbitration Order No. U-22145). 'Id. at 24-5. 'Arizona Corporation Commission, Opinion and Order No. 59915 at 16, Petition of AT&T Communications of the Mountain States, Inc. for Arbitration of Interconnection Rates, Terms, and Conditions with U S West Communications, Inc., Dkt. Nos. U-2428-96-417 and E-1051-96-417 (Oct. 23, 1996) (AT&T Arizona Arbitration Order No. 59915). 'Id. at 17. 'AT&T Arizona Arbitration Order No. 59915 at 17. 'Ibid. 'AT&T and MCI Missouri Arbitration Order at 28. 'Id. at 29. 'AT&T Arizona Arbitration Order No. 59915 at 22. 'Ibid. 'AT&T Louisiana Arbitration Order No. U-22145 at 3. 'Id. at 4. 'Id. at 10. 'Ibid.	

While these tactics may or may not persuade regulators that local competition has failed, they apparently have persuaded Wall Street that AT&T and MCI show little promise as

competitors in any market. The stock prices of both companies have fallen far behind the rest of the market, even as the stock prices of companies like WorldCom and TCG have forged far ahead.¹³⁶ (See Figure 18).

AT&T and MCI have the most to lose in residential long-distance markets, but WorldCom and other players with no direct interest in that market have their own equally strong incentives to keep Bell Companies under regulatory quarantine. The most profitable opportunity for these companies is to sell bundled services to business customers. WorldCom uses its own long-distance network to supply the long-distance component of the bundle; other companies may resell AT&T's, MCI's, or WorldCom's service and accommodate customer demand by doing so. Their business strategy thus centers on creating bundled products that their main rivals, the Bell Companies, are not permitted to match. A calculated strategy of competitive failure in residential markets thus preserves a vital competitive edge in business markets. If Ford could block General Motors from selling tires with any of its cars it would surely do so – even if Ford competed against GM only in sales to business customers.

¹³⁶As of the end of October 1997, AT&T's and MCI's stocks were 50 and 18 percent below the Dow Jones Industrial Average, respectively. WorldCom and TCG, on the other hand, were 23 and 125 percent above, respectively. Quicken, <http://quotes.quicken.com>. BT's recent reduction of MCI's purchase price has caused MCI's stock to tumble even further (by 17 percent, a drop in market value of \$3.4 billion). *MCI and British Telecom Cut Merger Value by 20 Percent, to \$18 Billion*, Communications Daily, Aug. 25, 1997.

4. POLICIES TO PROMOTE COMPETITION

Understanding the regulatory environment, and the tactical maneuvering it elicits, is thus essential to answering the question raised at the end of Section 1: Will competitors ever arrive to challenge local incumbents in the market for basic, residential voice service? Residential competition is unfolding more rapidly in some states than in others. Connecticut is different from Texas or Florida. This is partly because each state's regulatory commission adopts its own regulatory priorities, and partly because certain anti-competitive federal policies apply to some local phone companies and not to others.

The balance between the various regulatory factors will vary from state to state, depending on the level at which residential prices are set, the cost of providing competitive service, and the perceived competitive threat from the incumbent local phone company. Today, the main obstacle to local residential competition is regulation itself.

Rebalancing Local Rates. In most U.S. jurisdictions, the defining economic fact of local exchange competition today is that price regulation is channeling close to 100 percent of the competition and new money into about 30 percent of the total market. AT&T, MCI, WorldCom, and other companies are all behaving quite rationally in directing all their competitive efforts toward the high end of the market. Any company with money to invest in new networks will build out to business customers who currently pay \$30 a month for measured service before it builds out to residential customers who currently pay a flat-rate \$17 for unlimited service.

Local rates are often set so far below cost that they make even resale competition very difficult. Under regulatory directive, incumbent phone companies now offer lines and dial tone service to resellers at a prescribed discount (generally 12 to 25 percent) from the already below cost prices. But it costs AT&T an estimated \$37 in marketing to sign up each new customer, and an estimated \$4 per month thereafter for billing and administrative expenses.¹³⁷ Even a 25 percent wholesale discount does not easily cover such expenses when applied to monthly residential rates that – even at retail – have already been pushed far below actual costs.¹³⁸ In

¹³⁷The initial marketing cost will increase to \$60-80 per customer in later years as competition tightens. S. Comfort, et al., Morgan Stanley & Co. Inc., Co. Rpt. No. 2516924, AT&T Corp., at Table 8 (Nov. 1, 1996).

¹³⁸When the new Act was signed in February 1996, AT&T immediately declared it could "almost taste" the large market share it would soon acquire in local markets, and predicted it would win "at least a third of the local market" using a resale strategy. Robert E. Allen, Former Chairman and CEO, AT&T, The 1996 Telecommunications Bill, remarks delivered at a News Conference, Washington, D.C., Feb. 8, 1996. However, an independent analyst quickly dismissed AT&T's goals as "implausible," pointing out that although resale is the least expensive strategy, "[t]he economics of local resale simply can't yield such high market share gains." C. Arnst,

many states, the best competitive strategy is to keep the incumbent caged, and the way to do that is not to compete in residential markets at all.

One way to promote competition in basic, residential wireline service is therefore to bring residential rates into closer alignment with cost, and narrow the gap between business and residential rates. Over the past several years, California, New York, and a few other large states have taken such steps. See Figure 11. And as a result, competitors in these states have already begun to offer competitive local service to residential subscribers. In these states, competitors have finally concluded that the competitive opportunities in residential markets outweigh the risk of unleashing competition by the incumbent Bell Companies. In California, which has one of the smallest residential-business disparities, competitors are providing over 180,000 resold lines; facilities-based competition is likewise significantly advanced, with 7,600 unbundled loops, over 100,000 interconnection trunks, and 270 physical collocation arrangements in service.¹³⁹ Likewise, Texas, which has a residential discount well below the national mean, especially for SBC's region, is seeing significant residential competition, with over 115,000 lines converted to resale. Britain has pursued a similar policy, and with considerable success.¹⁴⁰ The 1996 Act takes some steps in that direction too: it directs the FCC to replace some implicit subsidies with explicit ones, in connection with service to schools, hospitals, high-cost rural areas, and the very cheap service options reserved for low-income subscribers.¹⁴¹

But the federal government and most states remain committed to inexpensive, price-averaged, residential rates. There are strong social and political reasons to maintain below-cost residential rates, and, because of network externalities, some legitimate economic justifications too. The challenge is to prevent this policy from creating competitive gridlock: economic

Ready, Set, Devour?, Business Week, July 8, 1996, at 118 (quoting Scott Cleland, Analyst, Washington Research Group).

¹³⁹See Section 1.

¹⁴⁰In 1983, British regulators set in place a price-cap plan that allowed BT to raise basic residential subscription fees 2 percent a year beyond inflation, while lowering measured and toll rates commensurately. A Brief History of Recent U.K. Telecoms and OFTEL, Office of Telecommunications, OFTEL, <http://www.oftel.gov.uk/history.htm> ("OFTEL Brief History"). In price cap terms, BT's prices for basic services were allowed to increase annually by an "X-factor" set 2 percentage points above the inflation rate while high-end services were reduced by an X-factor 3 percentage points below the inflation rate from 1985 to 1989. In 1990, the X-factor increased to 4.5 percentage points and has changed every 3 years since. M. Lambert, et al., NatWest Securities Ltd., Ind. Rpt. No. 1856381, UK Telecommunications, at 56 (Feb. 12, 1997). This gave cable operators a stronger incentive to deploy networks, offer phone service, and undercut BT's basic rates. For example, in 1996 Bell Cablemedia cut its line rental charges by 14 percent. *Bell Cablemedia Gives "Powerful" Price Message*, FinTech Telecom Markets, July 4, 1996. Competition overtook regulation as the main factor disciplining BT's prices, and in 1996, British regulators eliminated the price cap entirely. *OFTEL Brief History*.

¹⁴¹The FCC recently implemented this mandate in its Universal Service Order. But this initiative affects only a small minority of subscribers.

conditions that deter long-distance carriers from entering local markets, and regulatory conditions that prohibit local carriers from entering long-distance markets. Losing the benefits of competition in both local and long-distance residential markets should not be the hidden price consumers pay for affordable residential service.

Unleashing Competition to Provide Bundled Service. If one component of residential service is to remain heavily subsidized, as it undoubtedly will in most states, competitors must be motivated to bundle that component with a broader package of more profitable services. If they aren't, they will probably never offer the subsidized component at all.

As noted at the end of Section 2, many consumers will buy bundled services if they can. The demand is there; the consumer preferences are strong. As soon as one vendor begins offering fully bundled local and long-distance service in any major market, other vendors will have to follow. They will have no choice.

To promote competition effectively, regulators must therefore articulate the right regulatory objective. Not "local residential competition," but rather "residential competition" – the whole bundle, local, local toll, long-distance, and other vertical services. The former objective cannot be achieved without significantly re-balancing local rates. The latter can.

Only the local incumbent, which already sells the least profitable piece of the package, has a clear incentive to sell the entire bundle the moment it's allowed to. These companies are already providing the most expensive, least profitable component of the bundle – local service itself. Adding on more profitable vertical services is obviously an attractive business proposition. The local carrier's incentive to bundle up into profitable markets is strong. The incentive to bundle down into unprofitable markets is weak. Worse than weak: there is no incentive at all if bundling down will unleash your most serious rival.

In these circumstances, the only way to get competition started is simply to let the bundling begin. Of course, local phone companies will try to bundle first, if they can: they have much to gain by doing so, and nothing to lose. But insisting that they start second only guarantees that no one will start at all. Only by allowing local phone companies to go first will regulators impel others to beat them to it. AT&T, MCI, and other long-distance carriers have no incentive at all to be first. But they do have a strong incentive not to be second or third. The moment it becomes clear that a first player is coming, long-distance carriers and others will make sure they are not left behind. At the very least, they will quickly begin packaging what they already sell with local loop and dial tone supplied to them by local carriers at discount rates.

This idea is not just theoretical. It has been tried, and it works.

The Connecticut Experience. Connecticut would not appear to be the nation-leading target for competition. Much of the southern part of the state is a residential suburb of New York City; business customers in the region are overwhelmingly located on the New York side of the border. As in most other states, residential rates are well below business rates – the discount in

Connecticut is about 62 percent. Connecticut features a cluster of medium-sized cities – five between 100,000 and 140,000, ranking from 137th to 184th in size nationwide – but has no major city to draw competitive attention.¹⁴² Even Hartford, the second largest city in the state and primary business center, ranks only 143rd in population nationwide.

Nevertheless, Connecticut was one of the first states targeted by major carriers for local competition. Four months before passage of the 1996 Act, AT&T announced that it would start with Connecticut when it entered local markets.¹⁴³ AT&T ultimately entered California residential markets a few months earlier, but Connecticut came second, in March 1997,¹⁴⁴ just four months later.¹⁴⁵ For its part, MCI included Hartford on its list of 31 initial targets for local entry; Hartford tied as the smallest market (by far) on MCI's list.¹⁴⁶ MCI has rapidly expanded its Connecticut network, has offered local business service on its own facilities since May 1996,¹⁴⁷ and says it will offer residential service in 1998.¹⁴⁸

Connecticut has proved equally attractive to cable, wireless, and other local competitors. In October 1996, TCI, the state's dominant cable operator, chose Hartford as its first U.S. locality in which to offer advanced digital telephone, cable, and Internet access services, including its People Link local phone service, ALL TV digital video service, and @Home high-speed Internet access.¹⁴⁹ TCI announced plans for a \$300 million structural upgrade in its Hartford network in

¹⁴²Bureau of the Census, *County and City Data Book 1994* at 698 (12th ed. 1994). The five largest cities in Connecticut are Bridgeport (137,020), Hartford (131,995), New Haven (123,966), Stamford (107,590), and Waterbury (106,904).

¹⁴³AT&T Press Release, *AT&T to Offer Local Phone Service, Starting in Connecticut*, Oct. 26, 1995.

¹⁴⁴S. Higgins, *AT&T Goes Local With Service Today*, New Haven Register, Mar. 1, 1997, at A1. AT&T was unable to enter the Connecticut market until it completed interconnection negotiations and arbitration over resale rates. These concluded in December 1996. Decision, Application of AT&T Communications of New England, Inc. for Arbitration Under the Telecommunications Act of 1996, Dkt No. 96-08-08 (Conn. DPUC Dec. 4, 1996).

¹⁴⁵AT&T rolled out local service in California in December 1996. M. Rosenberg, *Breaking the Lock*, Kansas City Star, Feb. 20, 1997, at B1. AT&T began offering local service in Michigan and Illinois a few weeks after it rolled out service in Connecticut, in Texas in July 1997, and in Georgia in September 1997.

¹⁴⁶MCI, MCI Local Service: Service Availability, <http://www.mci.com/aboutus/products/local/textavail.shtml> (MCI target markets); Rand McNally, 1993 Commercial Atlas & Marketing Guide 60 (1994) (population of Metropolitan Statistical Areas). The Hartford MSA is almost exactly the same size as the Raleigh-Durham MSA.

¹⁴⁷K. Donnelly, *MCI Celebrates the Anniversary of Connecticut Local Telecommunications*, Business Times - New Haven Connecticut, May 1997, at 1 (since it lit up Hartford network, MCI has "expanded throughout the area, a radius of twenty to twenty-five miles").

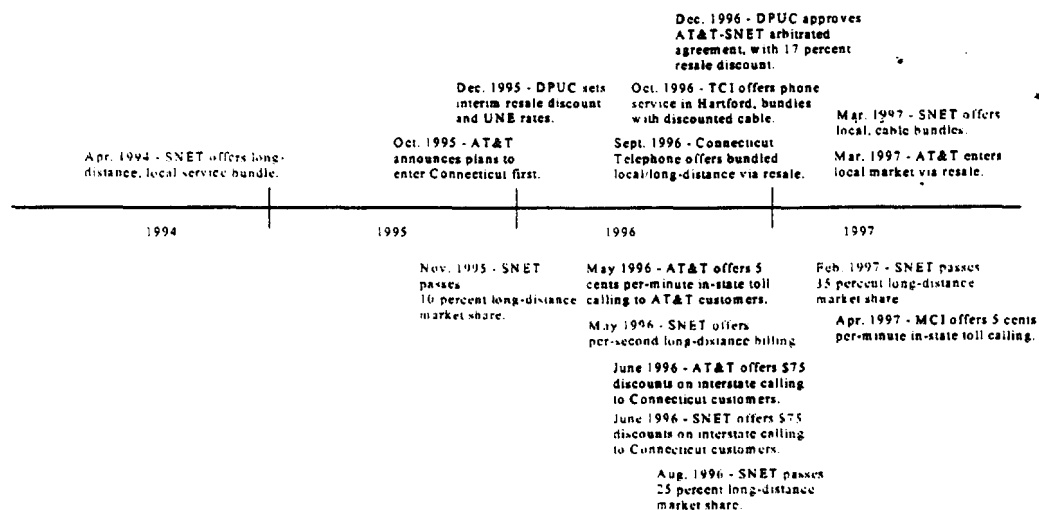
¹⁴⁸W. Hathaway, *AT&T is Warned After Call to State Regulator*, Hartford Courant, Apr. 3, 1997, at F1.

¹⁴⁹TCI Rolls Out Digitally in IL, CA, Media Daily, Feb. 10, 1997.

1995.¹⁵⁰ Since 1995, however, TCI virtually stopped upgrading its systems in all but two other cities.¹⁵¹ In June 1997, TCI raised its cable rates an average of 6.5 percent almost everywhere in the country – except Connecticut.¹⁵² Cablevision began offering 45 percent discounts to Fairfield customers in May 1997.¹⁵³ Connecticut Telephone, a cellular reseller, began offering a bundle of resold local and long-distance service to business and residential customers statewide in 1996.¹⁵⁴ At least 19 other competitors – including major players Brooks Fiber, Cable & Wireless, MFS, Sprint, and Teleport – have been certified by the DPUC to offer local exchange service.¹⁵⁵

Figure 19.

Figure 19. Connecticut Local and Long-Distance Competition



What made Connecticut so fortunate? It is the only state in the continental United States whose main phone company – Southern New England Telephone (SNET)¹⁵⁶ – is permitted to

¹⁵⁰B. Keveney, *TCI Service to Expand Next Month*, Hartford Courant, Dec. 20, 1995, at A3.

¹⁵¹TCI upgraded networks in two other markets, Fremont, California, and Arlington Heights, Illinois, as it was upgrading Hartford. It rolled out telephony and digital video services in February 1997. *TCI Rolls Out Digitally in IL, CA*, Media Daily, Feb. 10, 1997.

¹⁵²P. Colman, *TCI Rate Hikes Run Gamut*, Broadcasting & Cable, June 2, 1997, at 68.

¹⁵³S. Higgins, *SNET Cable TV Service Expands Into Third City*, New Haven Register, July 3, 1997, at C12.

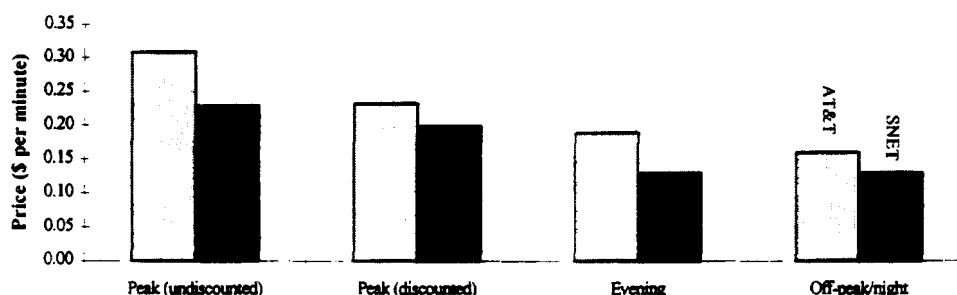
¹⁵⁴D. Haar, *Making the Right Call*, Hartford Courant, Apr. 14, 1997, at 10.

¹⁵⁵*AT&T and MCI Appeal Conn. Decision to Allow SNET to Operate as CLEC*, Comm. Daily, Aug. 14, 1997; D. Haar and W. Hathaway, *Options for Phone Users Could Be Slow to Emerge*, Hartford Courant, June 7, 1997, at A1. These companies are currently providing only business services.

¹⁵⁶SNET serves 97 percent of Connecticut access lines. Bell Atlantic - New York (formerly New York Telephone) serves around 38,000 access lines in Greenwich; Woodbury Telephone serves approximately 17,000

offer complete bundles of service to residential customers. SNET began offering such a bundle to Connecticut customers in April 1994.¹⁵⁷ At the time, AT&T provided about 85 percent of the residential long-distance services in the state;¹⁵⁸ SNET immediately undercut AT&T by an average of 17 percent.¹⁵⁹ **Figure 20.** SNET steadily gained, and AT&T steadily lost, long distance market share in the state.¹⁶⁰ By February 1997, SNET was providing long-distance service to about 35 percent of access lines – mainly residential lines – in the state.¹⁶¹ Provider concentration in the Connecticut long-distance market dropped sharply. **Figure 21.**

Figure 20. Connecticut Long Distance Rates



customers in the Woodbury area. Decision, DPUC Review of Telecommunications Policies, Dkt No. 91-10-06 (Conn. DPUC July 7, 1993).

¹⁵⁷S. Jackson, *A Telecom Yankee Defends Its Turf*, Business Week, Oct. 28, 1996, at 167; *SNET Introduces "Equal Access" Technology and Welcomes Long Distance Phone Competition to Connecticut*, Middlesex Magazine & Business Review, Nov. 1995, at 75.

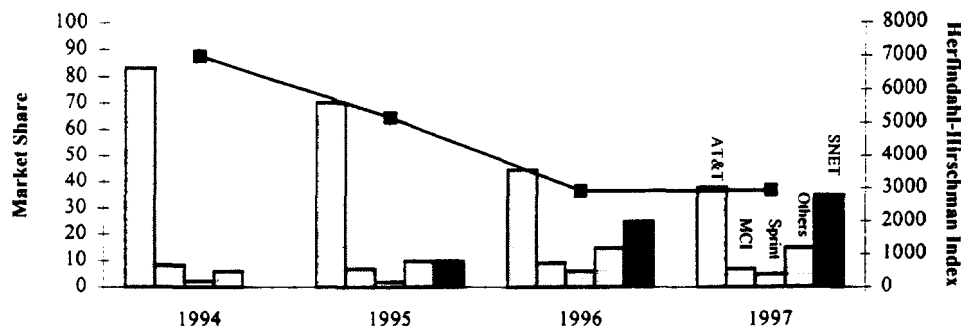
¹⁵⁸MCI and Sprint had garnered just 8.4 and 2.4 percent market shares, respectively. *FCC Long Distance Market Shares* at Table 9 (July 1997).

¹⁵⁹SNET prices averaged a 24 percent discount below AT&T's standard rates, and a 10.6 percent discount below AT&T's discount plans. Declaration of Professor Jerry A. Hausman at 11-12, attached to Application by BellSouth for Provision of In-Region InterLATA Services in South Carolina (F.C.C. filed Sept. 30, 1997). (*"Hausman Decl."*). The weekend rate is 23 percent lower. Even AT&T's 1997 price cuts and one-rate plans were matched and bettered by SNET. *Ibid.*

¹⁶⁰By the end of 1995, SNET provided long distance to 10 percent of Connecticut access lines. K.M. Leon, et al., Lehman Brothers, Inc., Ind. Rpt. No. 1660743, Telecommunications Services, at 62 (Nov. 9, 1995). By August 1996 that share had risen to 25 percent. D. Reingold, et al., Merrill Lynch Capital Markets, Ind. Rpt. No. 1773310, Telecom Services, RBOCs & GTE (Aug. 9, 1996). These share gains were at the expense of AT&T, whose share dropped to 45 percent. *FCC Long Distance Market Shares* at Table 9 (July 1997).

¹⁶¹D. Reingold, et al., Merrill Lynch Capital Markets, Ind. Rpt. No. 1864862, Telecom Services, RBOCs & GTE (Feb. 19, 1997). SNET has been particularly successful in attracting residential customers; its share of revenues is 20 percent, its share of customers is 30 percent. See S. Jackson, *A Telecom Yankee Defends its Turf*, Business Week, Oct. 28, 1996, at 167.

Figure 21. Connecticut Residential Long Distance Market Share



Unable to block SNET in the regulatory arena, AT&T and MCI simply had to respond in the marketplace, and that is exactly what they did. As one Connecticut newspaper reported, "AT&T chose Connecticut for its first major thrust in part because SNET has been so aggressive in going after AT&T's long-distance customers."¹⁶² TCI and Cablevision were spurred to compete in just the same way¹⁶³ by the deregulation of SNET,¹⁶⁴ followed by SNET's aggressive entry into their markets.¹⁶⁵

¹⁶²S. Higgins, *AT&T Goes Local with Service Today*, New Haven Register, Mar. 1, 1997, at A1 (citing unnamed analysts).

¹⁶³According to a TCI spokesman, Hartford was chosen for the network upgrade because of SNET's likely entry into cable. B. Kevney, *TCI Service to Expand Next Month*, Hartford Courant, Dec. 20, 1995, at A3 (quoting Matt Fleury, TCI spokesman). TCI offered its advanced services in Hartford just one month after SNET had received permission from the state to compete with TCI. *TCI Rolls Out Digitally in IL, CA*, Media Daily, Feb. 10, 1997. TCI did not raise rates in Connecticut due to SNET's presence. P. Colman, *TCI Rate Hikes Run Gamut*, Broadcasting & Cable, June 2, 1997, at 68 ("In virtually all of its Connecticut systems . . . TCI has decided to hold off on rate increases for the time being. The primary reason: competition."). Cablevision cut its rates soon after SNET entered its Fairfield franchise. S. Higgins, *SNET Cable TV Service Expands Into Third City*, New Haven Register, July 3, 1997, at C12.

¹⁶⁴In September 1996, Connecticut regulators granted SNET a statewide cable franchise over the objections of incumbent cable operators. Decision, Application of SNET Personal Vision, Inc. for a Certificate of Public Convenience and Necessity to Provide Community Antenna Television Service, Dkt No. 96-01-24 (Conn. DPUC Sept. 25, 1996).

¹⁶⁵In 1994, SNET undertook an effort to upgrade to a hybrid fiber-coax network, and began testing video services in West Hartford in 1995. *SNET's Listfield Says Value is Key for Telco Going Into Cable Biz*, Telco Business Report, June 3, 1996. SNET first offered cable service in Farmington in March 1997, and added two other cities by July, with plans to add 25 more within two years. S. Higgins, *SNET Cable TV Service Expands Into Third City*, New Haven Register, July 3, 1997, at C12; W. Hathaway, *SNET Expanding Competition for Cable Subscribers*, Hartford Courant, July 3, 1997, at F1.